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CLINICAL IMAGE

Annular pancreas in a toddler

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A 2-year-old girl presented to the emergency department with severe abdominal pain, bilious emesis, and elevated serum amylase and lipase levels. Abdominal MRI demonstrates an annular pancreas encircling a collapsed second portion of the duodenum (*arrow*) (Fig. 1). An MRCP demonstrates the duct of the annular pancreas (*arrow*), main pancreatic duct (*arrowhead*) and a dilated common bile duct (*dotted arrow*) (Fig. 2).

Abnormal fusion of the ventral pancreatic bud to the duodenum is believed to cause annular pancreas. Tethering limits rotation and fusion with the dorsal bud resulting in pancreatic tissue encircling the duodenum. Duodenal obstruction occurs in 10% of these cases leading to diagnosis in the newborn period [1]. An annular pancreas is also associated with cardiac and intestinal anomalies [2]. A normal upper gastrointestinal series excluded duodenal stenosis in our patient. Her condition was managed with prolonged bowel rest on TPN and she was discharged after tolerating a bland, low-fat diet.

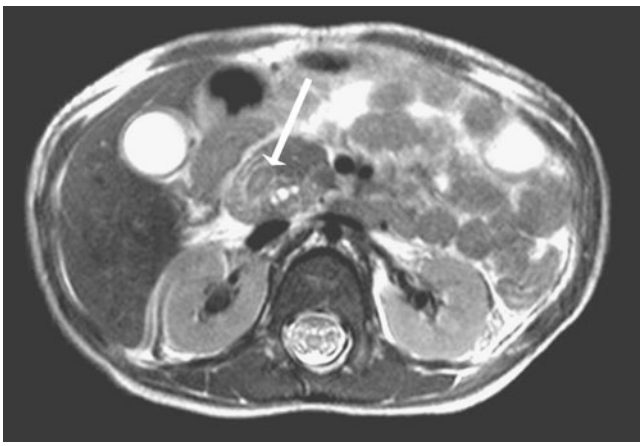

Fig. 1 Axial T2-W MRI through the pancreatic head

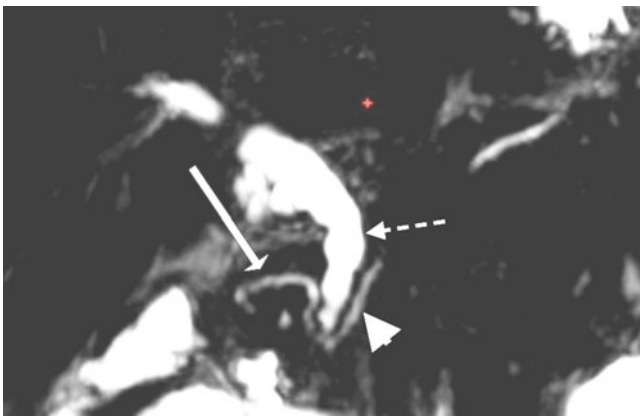

Fig. 2 Coronal MIP reconstruction from MRCP

References

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